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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,768

03/30/2005

Tatsuo Kamei

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EXAMINER

POPOVICI, DOV

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

03/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,768

Applicant(s)

KAMEI, TATSUO

Examiner

Dov Popovici

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


DOV POPOVICI
PRIMARY PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/30/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 23-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 23-25 are claiming a program per se. Claims 23-25 are directed to non-statutory functional descriptive material. "Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. " " Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as

nonstatutory functional descriptive material" (see Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 25, lines 3-5, the claimed recitation of "an order in which the print data with the attribute generated from the print data in the writing step" is unclear, vague and indefinite in the context of the claim. It appears that the above recitation should be rewritten as -- an order in which the print data with the attribute generated from the print data is written into the memory in the writing step-- as similarly claimed in claim 15. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino et al. (US 2002/0054109 A1).

As to claim 1, Ogino et al. discloses a print control apparatus (see figure 14) that controls a printer engine (3e and 3f) which prints data contents based on print data indicating the contents to be printed, comprising: a data generation unit (PS & PCL processing and function processing) operable to i) obtain the print data from outside the print control apparatus (i.e., obtains data from host computer 2) and ii) generate print data; a storage unit (3a and 3d) having a region for storing the print data with the attribute (page information); a writing unit (function processing) operable to write, into the storage unit (3a and 3d), the print data with the attribute; an arrangement display unit (3c) operable to arrange and display, based on an operation by a user, each print processing name of a plurality of print data with the attribute stored in the storage unit in an order according to the attribute information included in each of the plurality of print data with the attribute; and a print execution unit (3e and 3f) operable to allow the user to select one of the print processing names displayed on the arrangement display unit, and cause the printer engine to execute printing based on the print data corresponding to the selected print processing name.

Ogino et al. teaches receiving from the host computer the print data with an attribute (page information; see figure 14) indicating the attribute of the print data (i.e. user name and job name). However, Ogino et al. does not specifically specifies that the

data generating unit, generates print data with an attribute by adding, to the print data, attribute information indicating the attribute of the print data.

The examiner takes "official notice" that generating print data with an attribute by adding, to the print data, attribute information indicating the attribute of the print data at the data generation unit in the printer as opposed to at the host computer (as taught by and shown by Orgino et al. figure 14) is simply a matter of a design choice of where to add the attribute either in the printer or the computer and would be obvious to implement in view of the fact that Orgino et al teaches generating print data with an attribute (page information, i.e., user name and job name) by adding, to the print data (PS or PCL data), attribute information (page information) indicating the attribute of the print data (see figure 14).

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Orgino et al. so that: the data generating unit, generates print data with an attribute by adding, to the print data, attribute information indicating the attribute of the print data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Orgino et al. so that: the data generating unit, generates print data with an attribute by adding, to the print data, attribute information indicating the attribute of the print data (i.e., the data generation unit is in the print control apparatus) at the printer vs. at the host computer, for the following reason(s): (a) doing so would thereby free the host computer at an earlier stage in time; (b) transferring the print data without the page information generated in the host, would

reduce the transferring time required to transfer the data between the host and printer, and thus additionally would free the host computer earlier stage in time to perform other task(s); and (c) while the printer generates the print data with an attribute by adding, to the print data, attribute information indicating the attribute of the print data, further reduces the possibility of errors in converting the page information at the printer with the limited amount of available characters and fonts available in the printer, thereby, generating the page information at the printer vs. the computer would prevent less error in messages displayed in the printer's display.

As to claim 2, Ogino et al. as modified discloses wherein the arrangement display unit further selects and displays a print processing name (i.e., user name and job name) corresponding to the attribute information specified by the user among the print processing names arranged in the order according to the attribute information (see figure 14).

As to claim 4, Ogino et al. as modified discloses wherein the data generation unit i) obtains, from outside the print control apparatus (i.e., host computer 2), information together with the print data, the information (page information) indicating an identifier (job name or user name) generated so that the print data is identified by the user, ii) generates attribute (either job or user name) information using the identifier as an attribute of the print data, and iii) adds the generated attribute information to the print data (see figure 14).

As to claim 5, Ogino et al. as modified discloses wherein the data generation unit i) extracts, from the print data, information indicating an identifier with which the print

data is identified by the user, ii) generates attribute information using the identifier as an attribute of the print data, and iii) adds the generated attribute information to the print data.

As to claim 6, Ogino et al. as modified discloses wherein the data generation unit obtains, as the identifier, information indicating a creator's name (user name, see figure 14) of the print data and generates attribute information indicating the creator's name.

As to claim 7, Ogino et al. as modified does not teach wherein the arrangement display unit arranges and displays said each print processing name of the plurality of print data in an order of fifty phonetic characters of the creator's name included, as an attribute information, in each of the plurality of print data with the attribute.

The examiner takes official notice that displaying each print processing name of the plurality of print data in an order of fifty phonetic characters of the creator's name included, as an attribute information, in each of the plurality of print data with the attribute, is well known in the art and displaying each name in the order of fifty phonetic characters of the creator's name is a matter of a design choice.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Orgino et al. wherein the arrangement display unit arranges and displays said each print processing name of the plurality of print data in an order of fifty phonetic characters of the creator's name included, as an attribute information, in each of the plurality of print data with the attribute.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Orgino et al. wherein the arrangement display unit arranges and displays said each print processing name of the plurality of print data in an order of fifty phonetic characters of the creator's name included, as an attribute information, in each of the plurality of print data with the attribute, so that different combination of different names using different phonetic characters can be displayed and selected by the user, therefore enhancing the creator's name and the print processing name.

As to claims 3 and 8-11, Ogino et al. as modified does not specifically teach wherein the data generation unit i) generates attribute information using, as an attribute of the print data, a number of papers needed when a printing based on the print data is executed by the printer engine and ii) adds the generated attribute information to the print data, wherein the data generation unit i) generates attribute information indicating that there is no readout from the storage unit, ii) adds the generated attribute information to the print data, and iii) updates, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to a number of times the print data has been read out, wherein the data generation unit i) generates attribute information indicating that there is no readout from the storage unit, ii) adds the generated attribute information to the print data, and iii) updates, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to an order in which the print data is read out

from the storage unit, and wherein the data generation unit i) generates attribute information using, as an attribute of the print data, an order in which the attributed print data generated from the print data is written into the storage unit by the writing unit, and ii) adds the generated attribute information to the print data.

However, the examiner takes "Official Notice" that generating attribute information using, as an attribute of the print data, a number of papers needed when a printing based on the print data is executed by the printer engine and ii) adding that generated attribute information to the print data, and generating attribute information indicating that there is no readout from the storage unit, and ii) adding that generated attribute information to the print data, and iii) updating, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to a number of times the print data has been read out, and generating attribute information indicating that there is no readout from the storage unit, and ii) adding that generated attribute information to the print data, and iii) updating, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to an order in which the print data is read out from the storage unit, and generating attribute information using, as an attribute of the print data, an order in which the attributed print data generated from the print data is written into the storage unit by the writing unit, and ii) adding that generated attribute information to the print data, is well known in the computer/printer technology environment.

It would have been obvious to one person having ordinary skill in the art at the time the invention was made to have modified Orgino et al. wherein the data generation unit i) generates attribute information using, as an attribute of the print data, a number of papers needed when a printing based on the print data is executed by the printer engine and ii) adds the generated attribute information to the print data, wherein the data generation unit i) generates attribute information indicating that there is no readout from the storage unit, ii) adds the generated attribute information to the print data, and iii) updates, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to a number of times the print data has been read out, wherein the data generation unit i) generates attribute information indicating that there is no readout from the storage unit, ii) adds the generated attribute information to the print data, and iii) updates, when the print data is read out from the storage unit for the printing by the print execution unit, contents of the attribute information corresponding to the print data to an order in which the print data is read out from the storage unit, and wherein the data generation unit i) generates attribute information using, as an attribute of the print data, an order in which the attributed print data generated from the print data is written into the storage unit by the writing unit, and ii) adds the generated attribute information to the print data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Orgino et al. because generating an attribute information, such as, number of papers needed when printing, or indicating that there is no readout from storage and updating when data is read out making the attribute

corresponding to the number of times the data has been read out, or an order in which the data is read out, or an order in which data generated from the print data is written into storage, are all well known attribute in the computer/printer technology environment, and such attributes would help and guide the user and/or operator to identify which print jobs are printed often or frequently vs. which jobs are stored and take memory space, but are rarely printed, and the number of papers needed when printing can inform the user as to how much paper supply is need and used as a printing resource, to insure that the print jobs get printed out.

As to claim 12, Ogino et al. as modified discloses wherein the arrangement display unit (3c) preferentially displays a character in a character string indicating said each print processing name (job name) from a character placed in a latter part of the character string (see figure 14).

Claims 13-17 and 18-22 are directed to a print control method and recite the same or similar claim language as recited in claims 1-5 and 8-12 above. Applicant is directed to the remarks and the discussion made in claims 1-5 and 8-12 above since claims 13-17 and 18-22 are similar and analogous method claims.

Claims 23-25 are directed to a program and recite the same or similar claim language as recited in claims 1-3 above. Applicant is directed to the remarks and the discussion made in claims 1-3 above since claims 23-25 are similar and analogous program claims.

Claims 26-28 are directed to a printer (3) comprising a printer engine (3e and 3f) and a print control apparatus (see figure 14) and recite the same or similar claim

language as recited in claims 1-3 above. Applicant is directed to the remarks and the discussion made in claims 1-3 above since claims 26-28 are similar and analogous claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dov Popovici whose telephone number is 571-272-4083. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dov Popovici
Primary Examiner
Art Unit 2625

DOV POPOVICI
PRIMARY PATENT EXAMINER